

## DEPARTMENT OF TRANSPORTATION NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C. 20091

November 26, 1969



OFFICE OF THE CHARMAN

> Honorable John H. Shaffer Administrator Federal Aviation Administration Washington, D. C. 20590

Dear Mr. Shaffer:

The investigation of an accident involving a Douglas DC-3, operating under Part 91 of the Federal Aviation Regulations, that occurred at New Orleans, Louisiana, March 20, 1969, revealed that two sections of Part 91 need revision in the interest of safety.

An approach and an attempt to land were made in fog conditions so extreme that the RVR was less than 600 feet—well below the minimum. Clearance was given for an approach at the request of the pilot. Under section 91.116, such a procedure is permissible since the restriction is on the landing and not the approach. Under sections 121.653, 123.27, and 135.111, such is not the case, and a pilot may not execute an instrument approach if the latest reported visibility is less than the landing minima because the restriction under these sections is on the approach as well as the landing. It is quite possible for the same aircraft in identical weather with the same error and passengers, to be permitted to make an approach on the one hand and be forbidden to initiate an approach on the other hand, simply by operating under different parts of the F.A.R.

The danger in section 91.116 is that a pilot may be encouraged to attempt an approach and "take a look." Our concern with section 91.116 is that it permits, and perhaps encourages, generally less qualified pilots to attempt approaches that are prohibited by the operating rules for air carriers and large commercial operators.

Section 91.117(b), which prescribes the conditions under which a descent below HDA or DH is authorized, tends to suggest that a landing can be made regardless of the visibility (if conditions (1) and (2) of the section are met) because visibility is not one of the conditions for requiring execution of a missed approach. The investigation of the DC-3 accident at New Orleans revealed that the pilot asked if it would be permissible to land with 600 feet visibility if he could get contact with the ground. The controller replied, "... if you can see the runway or

approach lights affirmative you can land." Certainly the intent of the regulation is not to allow approaches or landing attempts in such adverse weather. Nevertheless, the present wording lacks specific language to prevent such attempts. The effect of 91.117(b) is that a descent to Category II limits is permissible, even though the aircraft and pilot may not be Category II qualified.

Earlier this year, the Safety Board recommended to your agency that an aircraft not be permitted to descend below 200 feet until the runway was in sight. The reason given for the FAA's not concurring was that such a requirement could result in dangerous rates of descent. It is conceivable that some pilots could become involved in high rates of descent, particularly in jet aircraft, if the decision to make a landing attempt were made late in the approach when the aircraft was close to the runway threshold. Nevertheless, the application of 200 feet in section 91.116(b) has merit. On a 3° glide slope, when an aircraft reaches 200 feet, it is slightly less than a half mile from the threshold (2,820 feet slant range, to be exact). Generally speaking, these are the minima for an IIS approach. On the day of the New Orleans accident, the ILS minima were actually 200 feet and 2,400 RVR. Using these criteria, there is no need for a pilot to descend below 200 feet on a non-Category II approach if he does not have minima upon reaching 200 feet.

We believe that it would be appropriate to modify section 91.116 in order to make operations under this section safer by raising the requirements to the level required of supplemental air carriers and commercial operators. In addition, it is deemed appropriate to clarify section 91.117(b) so that there is no chance of misinterpretation when a missed approach must be executed. Accordingly, the Board recommends that:

- 1. Section 91.116 of the F.A.R. be changed to agree with the provisions of section 121.653 and the similar requirements of Parts 123 and 135 in order that the approach be restricted as well as the landing.
- 2. Section 91.117 be amended to the effect that in no event shall descent below 200 feet be performed unless landing minima are present.
- 3. While section 91.116(b) clearly states that a landing may not be made unless the visibility is at or above the landing minimum required, nevertheless, in the interests of safety and in order to insure proper interpretation, all conditions requiring a missed approach should be contained in section

91.117(b). Accordingly, an additional condition should be added to section 91.117(b) to the effect that if landing minima cannot be maintained, a missed approach must be executed.

Sincerely yours,

John H. Reed

Chairman